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| GeometryUnit 9 Review 2015 |  | **Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** **Period:\_\_\_\_\_\_\_\_** |

**Show all work for full credit!**

|  |  |
| --- | --- |
| 1. Area = 310 cm2, Find the **exact** base.  |  2. Area = 38 cm2, Find the **exact** height. |
| 3. Given that  and .Find the **exact** arc length and the area of a sector.(answer in terms of) | 4. The Area of a circle is . Find the **exact** **diameter** of the circle. |
|  5. Find the **exact**  radius of the circle with the area sector in2. |  6. Find the **exact** area of the shaded region. |
| 7a. Find the **exact** area of the shaded region. | 7b. Find the **exact** area of the shaded region. |
|  |

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| 1. Solve for the **exact value** of and  in the following special right triangles.
 |
|  | a. |  | b. |  | c. |  |
|  |  |  = \_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_\_ |  |  = \_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_\_ |  |  = \_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_\_ |
|  | d. |  | e. |  | f. |   |
|  |  |  = \_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_\_ |  |  = \_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_\_ |  |  = \_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_\_ |
| 1. Use the Pythagorean Theorem to find the **exact** lengths of the missing sides.

22 cmp 41 cm |
|  | a.14 ft6 ft x |  |  |  b.  |  |  |
| 10. Sean and Shelly leave at a same intersection of I-90 and I-5 at 10:00 am. Sean travels I-90 east at 55 mph and Shelly travels I-5 south at 62 mph and both stop at 12:30 pm at gas stations. How far away is Sean from Shelly at 12:30 pm? **Sketch** the problem, and **round to the nearest mile**. |

11. Simplify the following radicals. DO NOT ROUND.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 1.
 | 1.
 | 1.
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 | 1.
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 | 1.
 | 1.
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| 1.
 | 1.
 | 1.
 | 1.
 | 1.
 | 1.
 |

12. Area of the circumscribed triangle = 192hm2

Find the **exact** radius of the inscribed circle.



radius = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |
| --- | --- |
| 13. a. Find the **exact** area. Area=\_\_\_\_\_\_\_\_\_\_\_\_\_ | b. Find the **exact** area. Area=\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  c. Find the **exact** area.10 nmArea= \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  |